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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,827	02/12/2002	Edward C. McKinney JR.	SHPR-01041USQ SRM/SDS	8062
23910	7590	10/06/2003	EXAMINER	
FLIESLER DUBB MEYER & LOVEJOY, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111			TRAN, THAO T	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/074,827	MCKINNEY ET AL.
	Examiner Thao T. Tran	Art Unit 1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-38 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \*    c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.	6) <input type="checkbox"/> Other: ____.

## DETAILED ACTION

### *Claim Objections*

1. Claims 2-3 are objected to because of the following informalities: claim 2, line 2, “second electrode” should be changed to --second electrodes--; claim 3, line 2 “two electrodes” should be changed to --two second electrodes--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-5, 8-10, 14-17, 20-21, 23, 25, 28-30, 31-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US Pat. 4,789,801).

Lee teaches an air conditioner (loud speaker), comprising a housing; a voltage generator; a first array of electrodes 74; a second array of electrodes 72 located downstream and in staggered relation to the first array; wherein the second electrodes are evenly spaced apart from each other (see Figs. 4-6; col. 6, ln. 43-56). The first electrodes are ion emitters and curved wires; the second electrodes are ion collectors and curved rods.

Lee further teaches the second electrodes to be of equal size (see Fig. 3-6) and that the second electrodes include an nose that is closer to the first electrodes (see Fig. 3).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-7, 11-13, 18-19, 22, 24, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claims 1, 8, 14, 15, 21, 23, 25 above.

Lee is as set forth in claims 1, 8, 14, 15, 21, 23, and 25 above and incorporated herein.

In regards to claims , Lee further teaches an array of electrodes interposed between the second electrodes (see Fig. 3). Lee does not teach the additional electrodes to be upstream of the first electrodes or downstream of the second electrodes. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the position of these additional electrodes would have been an obvious matter of design choice, since Applicants have not disclosed the advantages of a particular position of the additional electrodes over other positions.

In regards to claims 13, 24, Lee does not specify the distance between the second electrodes from the outlet. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the distance of the second electrodes to the outlet would have been an art-recognized variable determined by routine experimentation. See MPEP 2144.05B.

***Contact Information***

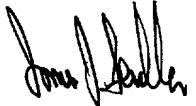
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 703-306-5698. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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September 30, 2003



James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 2920